DBT Geometerics **November 18, 2020 1 pm to 4:30 pm**

Day 1 PM Question an Answer Record

Source	Type	Identity	Timestamp	Content
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 17:58	Welcome back to Gemetrics, the PM session. We will start at 1 pm
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 17:59	We will be starting with Vertical Alignment this afternoon
Moderator	Announcement	Mark Shulick (ShulickM@michigan.gov)	11/18/2020 18:02	Here's the link to our Design Basic Training WIKI website: http://mdotwiki.state.mi.us/design/index.php/Category:Design_Basic_Training
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:04	If you would like the Horizontal Alignment segment repeated at the end of the day, please message here and we can make that happen. We are ahead of schedule
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:05	Thanks for rejoining us. We look forward to another interactive session this afternoon
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:05	If you have issues with the Q&A, I can be reached by text at 517.256.3576
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:06	Mark Shulick can be reached by text at517.899.4313
Attendee	Question	Grace S (Unverified)	11/18/2020 18:23	I would appreciate a repeat of the horizontal alignment information if there is time
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:25	OK. I will let them know and we can do that. We are ahead of schedule. Thanks for contacting us(Grace S (Unverified) asked "I would appreciate a repeat of the horizontal alignment information if there is time")
Attendee	Response	Grace S (Unverified)	11/18/2020 18:33	Thank you(Grace S (Unverified) asked "I would appreciate a repeat of the horizontal alignment information if there is time")
Attendee	Question	Alex (Unverified)	11/18/2020 18:31	Is the "max 1% algebraic grade differential" referring to the point where the existing pavement meets the proposed grade? i.e. at POB and/or POE?
Attendee	Response	Alex (Unverified)	11/18/2020 18:40	Julie-(Alex (Unverified) asked "Is the "max 1% algebraic grade differential" referring to the point where the existing pavement meets the proposed grade? i.e. at POB and/or POE?")

Attendee	Response	Alex (Unverified)	11/18/2020 18:41	I wonder if Bill can't hear you either??(Alex (Unverified) asked "Is the "max 1% algebraic grade differential" referring to the point where the existing pavement meets the proposed grade? i.e. at POB and/or POE?")
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:47	I was wondering that too ....(Alex (Unverified) asked "Is the "max 1% algebraic grade differential" referring to the point where the existing pavement meets the proposed grade? i.e. at POB and/or POE?")
Attendee	Question	Alex (Unverified)	11/18/2020 18:31	Is the "max 1% algebraic grade differential" referring to the point where the existing pavement meets the proposed grade? i.e. at POB and/or POE?
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:32	Thanks for the question. I will ask Mark when we get to the questions segment(Alex (Unverified) asked "Is the "max 1% algebraic grade differential" referring to the point where the existing pavement meets the proposed grade? i.e. at POB and/or POE?")
Attendee	Question	Anonymous (Unverified)	11/18/2020 18:45	If using a headset, some have a mute button on the cord
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:49	Unfortunately Bill has a desktop and is calling in on a phone. And of course this didn't happen when we practiced .....LOL(If using a headset, some have a mute button on the cord)
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:46	Thanks for your patience with our audio issues!
Attendee	Question	Anonymous (Unverified)	11/18/2020 18:48	Can confirm I can hear Bill as an attendee as well.
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 18:49	Thank you!(Can confirm I can hear Bill as an attendee as well.)
Attendee	Question	Anonymous (Unverified)	11/18/2020 18:57	what is a "slip ramp"?
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:04	See Geometric Design Guide 202B(what is a "slip ramp"?)
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:04	We will be back at 2:18 and resume with Shoulder Width
Moderator	Announcement	Mark Shulick (ShulickM@michigan.gov)	11/18/2020 19:13	Please take a couple minutes to fill out the online survey at the following link: https://forms.microsoft.com/Pages/ResponsePage.aspx?id=h3D71Xc3rUKWaoku9HIl0TIgoBv-nwdGiQxrvxV8ZhRUQ0ZMUVYySVgzUFJSSkJZNVdaMUs4T08wUS4u
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:17	Welcome back from break. We will start at 2:18. We are resuming with Shoulder Width

Attendee	Question	Todd Bonzelet (Unverified)	11/18/2020 19:29	Hasn't the "consider" wording been clarified and now mean "shall" for Interstate with truck traffic exceeding DDHV 250? See https://safety.fhwa.dot.gov/geometric/pubs/mitigationstrategies/chapter3/3_shoulderwidth.cfm
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:32	I will ask Mark when we get to the questions section(Todd Bonzelet (Unverified) asked "Hasn't the "consider" wording been clarified and now mean "shall" for Interstate with truck traffic exceeding DDHV 250? See https://safety.fhwa.dot.gov/geometric/pubs/mitigationstrategies/chapter3/3_shoulderwidth.cfm")
Attendee	Question	Anonymous (Unverified)	11/18/2020 19:37	What is the threshhold to consider as high commercial traffic?
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:51	250 directional design hour(What is the threshhold to consider as high commercial traffic?)
Attendee	Response	Anonymous (Unverified)	11/18/2020 20:21	Thank you! :)(What is the threshhold to consider as high commercial traffic?)

Attendee	Question	Todd Bonzelet (Unverified)	11/18/2020 19:39	Here is the clarification from the link. See second pargraphClarification: Minimum Shoulder Widths for Interstate Highways One clarification for shoulder width design exceptions relates to the requirements for Interstates with six or more lanes. The adopted criteria for Interstates specify that the paved width of the right shoulder shall not be less than 10 feet (3.0 meters). Where truck traffic exceeds 250 DDHV (the design hourly volume for one direction), a paved shoulder width of 12 feet (3.6 meters) should be considered. On a four-lane section, the paved width of the left shoulder shall be at least 4 feet (1.2 meters). On sections with six or more lanes, a 10-foot (3.0-meter) paved width for the left shoulder should be provided. Where truck traffic exceeds 250 DDHV, a paved width of 12 feet (3.6 meters) should be considered. Regardless of the differences in language used in the adopted criteria ("shall," "should be considered," etc.) all of the shoulder widths described above have become standards for the Interstate System by virtue of their adoption by FHWA, and they are the minimum values for each condition described. Therefore, a project designed for the Interstate System that does not provide the applicable shoulder widths would require a formal design exception.

Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:49	Thanks Todd. I'll have Mark and Bill review you statement more. As well as Carlos(Todd Bonzelet (Unverified) asked "Here is the clarification from the link. See second pargraphClarification: Minimum Shoulder Widths for Interstate Highways One clarification for shoulder width design exceptions relates to the requirements for Interstates with six or more lanes. The adopted criteria for Interstates specify that the paved width of the right shoulder shall not be less than 10 feet (3.0 meters). Where truck traffic exceeds 250 DDHV (the design hourly volume for one direction), a paved shoulder width of 12 feet (3.6 meters) should be considered. On a four-lane section, the paved width of the left shoulder shall be at least 4 feet (1.2 meters). On sections with six or more lanes, a 10-foot (3.0-meter) paved width for the left shoulder should be provided. Where truck traffic exceeds 250 DDHV, a paved width of 12 feet (3.6 meters) should be considered. Regardless of the differences in language used in the adopted criteria ("shall," "should be considered," etc.) all of the shoulder widths described above have become standards for the Interstate System by virtue of their adoption by FHWA, and they are the minimum values for each condition described. Therefore, a project designed for the Interstate System that does not provide the applicable shoulder widths would require a formal design exception.")
Attendee	Question	Anonymous (Unverified)	11/18/2020 19:39	Where can we find the Shoulder Widths table that was shown? I've never seen it before.
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:49	It is an unpublished table (Where can we find the Shoulder Widths table that was shown? I've never seen it before.)
Attendee	Question	Anonymous (Unverified)	11/18/2020 19:39	no audio
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:41	Is it back now(no audio)
Attendee	Response	Anonymous (Unverified)	11/18/2020 19:42	Yes. Thank you.(no audio)
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:42	Good. I'm glad it is back(no audio)

Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:43	We are working on the 3rd problem
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:43	We will go over the solution at 2:55
Attendee	Question	Anonymous (Unverified)	11/18/2020 19:43	"Consider" is not taken as "shall" - Carlos
Attendee	Question	Anonymous (Unverified)	11/18/2020 19:45	"Consider" is not taken as "shall" - Carlos
Attendee	Question	Todd Bonzelet (Unverified)	11/18/2020 19:51	Hey Julie, you don't have to publish this, but my understanding was that FHWA posted a clarification of "shall" vs "consider" as it relates to shoulder width. I agree that they have NOT changed the wording in the Green Book. In the link I posted above, you can find it under the "Clarification, Minimum Shoulder Widths for Interstate Highways" heading.
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:53	OK. Thanks Todd. We can look over the link more later(Todd Bonzelet (Unverified) asked "Hey Julie, you don't have to publish this, but my understanding was that FHWA posted a clarification of "shall" vs "consider" as it relates to shoulder width. I agree that they have NOT changed the wording in the Green Book. In the link I posted above, you can find it under the "Clarification, Minimum Shoulder Widths for Interstate Highways" heading.")
Attendee	Question	Anonymous (Unverified)	11/18/2020 19:51	What is the threshhold to consider as high commercial traffic?
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:52	250 directional design hour(What is the threshhold to consider as high commercial traffic?)
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 19:54	We will get to the problem 3 solution soon
Attendee	Question	JT Covington (Unverified)	11/18/2020 19:57	I thought that we use 8' right and 4' left for a divided arterial?
Attendee	Question	JT Covington (Unverified)	11/18/2020 19:57	for the sholder ^
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:00	Thanks for your question and for making this an interactive session(JT Covington (Unverified) asked "for the sholder ^")
Attendee	Question	JT Covington (Unverified)	11/18/2020 20:00	I thought that we use 8' right and 4' left for a divided arterial?
Attendee	Question	JT Covington (Unverified)	11/18/2020 20:00	for the sholder ^
Attendee	Question	JT Covington (Unverified)	11/18/2020 20:01	makes sense, thank you
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:01	You are welcome!(JT Covington (Unverified) asked "makes sense, thank you")
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:02	We are working on Question 4. We will give the solution at 3:15
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:02	If you have any questions in the meantime, please feel free to use the Q&A

Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:06	We have another 10 minutes on this exercise #4. In the meantime we are not broadcasting any audio
Attendee	Question	Anonymous (Unverified)	11/18/2020 20:11	For the same speed, in a urban setting, why is a steeper grade allowed than in a rural setting? Would think it would be opposite.
Attendee	Question	Anonymous (Unverified)	11/18/2020 20:12	For the same speed, in a urban setting, why is a steeper grade allowed than in a rural setting? Would think it would be opposite.
Attendee	Question	Perkinsm12 (Unverified)	11/18/2020 20:14	a) 55mph b) 12ft c) 6 d) 495ft e) 5%
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:29	Thank you for your participation and interaction during this training session(Perkinsm12 (Unverified) asked "a) 55mph b) 12ft c) 6 d) 495ft e) 5%")
Attendee	Question	Anonymous (Unverified)	11/18/2020 20:18	why is lane width not 10'? the footnote says multi-lane un-divided(regardless of ADT)
Attendee	Question	Anonymous (Unverified)	11/18/2020 20:19	why is lane width not 10'? the footnote says multi-lane un-divided(regardless of ADT)
Attendee	Question	Anonymous (Unverified)	11/18/2020 20:23	Refering to question #4- on 3A-1 ,for Non-freeway- with design speed 55 mph , and ADT over 2000 it says the min lane width is 12 foot. Where does it say that 11' is permitted for this speed?
Attendee	Question	Anonymous (Unverified)	11/18/2020 20:27	Refering to question #4- on 3A-1 ,for Non-freeway- with design speed 55 mph , and ADT over 2000 it says the min lane width is 12 foot. Where does it say that 11' is permitted for this speed?
Moderator	Response	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:28	I will ask after Mark completes the Horizontal Alignment section. Thanks for your question(Refering to question #4- on 3A-1 ,for Non-freeway- with design speed 55 mph , and ADT over 2000 it says the min lane width is 12 foot. Where does it say that 11' is permitted for this speed?)
Moderator	Response	Mark Fisher (FISHERM@michigan.gov)	11/18/2020 20:36	For question #4 refer to RDM section 3.09.02B(Refering to question #4- on 3A-1 ,for Non-freeway- with design speed 55 mph , and ADT over 2000 it says the min lane width is 12 foot. Where does it say that 11' is permitted for this speed?)
Attendee	Question	Anonymous (Unverified)	11/18/2020 20:34	thanks
Moderator	Announcement	Mark Shulick (ShulickM@michigan.gov)	11/18/2020 20:36	Here's the link to our Design Basic Training WIKI website: http://mdotwiki.state.mi.us/design/index.php/Category:Design_Basic_Training

Moderator	Announcement	Mark Shulick (ShulickM@michigan.gov)	11/18/2020 20:37	Please take a couple minutes to fill out the online survey at the following link: https://forms.microsoft.com/Pages/ResponsePage.aspx?id=h3D71Xc3rUKWaoku9HIl0TIgoBv-nwdGiQxrvxV8ZhRUQ0ZMUVYySVgzUFJSSkJZNVdaMUs4T08wUS4u
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:39	Thanks for attending
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:39	We hope you can rejoin us tomorrow for Day 2
Moderator	Announcement	Julie Townsend (TownsendJ@michigan.gov)	11/18/2020 20:40	Session has ended